

WHAT IS CLAIMED IS:

- 1 1. A game ball comprising:
2 a casing having a laced region; and
3 a lacing coupled to the laced region of the casing, the lacing having an
4 exposed surface, at least a portion of the exposed surface of the lacing having a pebbled
5 texture.
- 1 2. The game ball of claim 1, wherein the entire exposed surface of the
2 lacing includes the pebbled texture.
- 1 3. The game ball of claim 1, wherein the pebbled texture comprises a
2 plurality of spaced apart pebble-like projections.
- 1 4. The game ball of claim 3, wherein the plurality of projections are
2 selected from the group consisting of irregularly shaped pebble-like projections, hemi-
3 spherically shaped projections, generally oval shaped projections, generally triangular
4 shaped projections, generally square shaped projections, generally rectangular shaped
5 projections, generally diamond shaped projections, generally pentagon-shaped
6 projections, other polygonal shaped projections, conical projections, frustoconical
7 projections, cylindrical projections, pyramid-shaped projections, cubic projections, and
8 combinations thereof.
- 1 5. The game ball of claim 3, wherein the plurality of projections are
2 arranged in a generally evenly spaced pattern across at least a portion of the exposed
3 surface.
- 1 6. The game ball of claim 3, wherein the plurality of projections are
2 randomly arranged across at least a portion of the exposed surface.

1 7. The game ball of claim 3, wherein the plurality of projections are
2 generally of equal size.

1 8. The game ball of claim 3, wherein the plurality of projections include
2 projections of two or more different sizes.

1 9. The game ball of claim 3, wherein each of the pebble-like projections
2 has a maximum length and a maximum width, and wherein the maximum length and
3 the maximum width define an aspect ratio of within 0.2 and 5.0.

1 10. The game ball of claim 9, wherein the aspect ratio is within 0.33 and
2 3.0.

1 11. The game ball of claim 4 wherein the lacing includes at least one
2 longitudinally extending segment and a plurality of transversely extending segments,
3 wherein the plurality of projections on the longitudinally extending segment have a first
4 shape, and wherein the plurality of projections on the transversely extending segment
5 have a second shape.

1 12. The game ball of claim 4, wherein the entire exposed surface of the
2 lacing includes a plurality of pebble-like projections.

1 13. The game ball of claim 4, wherein the lacing further comprises an inner
2 substrate and an outer layer, wherein the outer layer includes the exposed surface, and
3 wherein the inner substrate is formed from one or more materials selected from the
4 group consisting of a woven cloth, a non-woven cloth, a urethane impregnated cloth, at
5 least one nylon strand, at least one polyester strand, a metal wire, a plastic, a vinyl, a
6 polymer, a latex, a rope, a leather strip and a combination thereof.

1 14. The game ball of claim 12 wherein the outer layer is made of an outer
2 material selected from the group consisting of a wet process polyurethane, a dry

3 process polyurethane, a coagulated polyurethane, a polyvinylchloride foam, a rubber, a
4 polymeric material, an elastomeric material, and a combination thereof.

1 15. A game ball comprising:
2 a casing having a laced region; and
3 a lacing coupled to the laced region of the casing, the lacing having an
4 exposed surface and a plurality of spaced-apart projections extending over at least a
5 portion of the exposed surface, the spaced-apart projections defining a plurality of
6 valleys, the projections having a height of between 0.002 and 0.250 inches.

1 16. The game ball of claim 15, wherein the projections are pebble-like
2 projections.

1 17. The game ball of claim 16, wherein the height of the pebble-like
2 projections range between 0.003 and 0.100 inches.

1 18. The game ball of claim 16, wherein the pebble-like projections have a
2 height of at least 0.004 inches.

1 19. The game ball of claim 16, wherein the pebble-like projections have a
2 height of at least 0.005 inches.

1 20. The game ball of claim 16, wherein the pebble-like projections have a
2 height of at least 0.010 inches.

1 21. The game ball of claim 16, wherein the entire exposed surface of the
2 lacing includes the pebble-like projections.

1 22. The game ball of claim 16, wherein the plurality of pebble-like
2 projections are selected from the group consisting of irregularly shaped pebble-like
3 projections, hemi-spherically shaped pebble-like projections, generally oval shaped

4 pebble-like projections, generally triangular shaped pebble-like projections, generally
5 square shaped pebble-like projections, generally rectangular shaped pebble-like
6 projections, generally diamond shaped pebble-like projections, generally pentagon-
7 shaped pebble-like projections, other polygonal shaped pebble-like projections,
8 generally conical pebble-like projections, generally frustoconical pebble-like
9 projections, generally cylindrical pebble-like projections, generally pyramid-shaped
10 pebble-like projections, generally cubic pebble-like projections, and combinations
11 thereof.

1 23. The game ball of claim 16, wherein the plurality of pebble-like
2 projections are arranged in a generally evenly spaced pattern across at least a portion of
3 the exposed surface.

1 24. The game ball of claim 16, wherein the plurality of pebble-like
2 projections are randomly arranged across at least a portion of the exposed surface.

1 25. The game ball of claim 16, wherein each of the pebble-like projections
2 has a maximum length and a maximum width, and wherein the maximum length and
3 the maximum width define an aspect ratio of within 0.2 and 5.0.

1 26. The game ball of claim 25, wherein the aspect ratio is within 0.33 and
2 3.0.

1 27. The game ball of claim 15, wherein the plurality of projections are
2 spaced apart by a plurality of valleys, and wherein each valley has a width of between
3 0.005 and 0.250 inches.

1 28. The game ball of claim 15, wherein each valley has a width of between
2 0.008 and 0.100 inches.

1 29. The game ball of claim 15, wherein the valleys have a transverse cross-
2 sectional shape selected from the group consisting of generally U-shaped, generally V-
3 shaped, generally hemi-spherically shaped, irregularly shaped and combinations
4 thereof.

1 30. A game ball comprising:
2 a casing having a laced region; and
3 a lacing coupled to the laced region of the casing, the lacing having an
4 exposed surface, at least a portion of the exposed surface of the lacing having a set of
5 markings generally configured to be a generally two-dimensional simulation of a
6 pebbled texture.

1 31. The game ball of claim 30, wherein the entire exposed surface of the
2 lacing includes the markings.

1 32. The game ball of claim 30, wherein the markings are selected from the
2 group consisting of irregularly shaped markings, generally circular markings, generally
3 oval markings, generally triangular markings, generally square markings, generally
4 rectangular markings, generally diamond shaped markings, generally pentagon-shaped
5 markings, other polygonal shaped markings, and combinations thereof.

1 33. The game ball of claim 30, wherein markings are arranged in a generally
2 evenly spaced pattern across at least a portion of the exposed surface.

1 34. The game ball of claim 30, wherein the markings are randomly arranged
2 across at least a portion of the exposed surface.

1 35. The game ball of claim 30, wherein the markings are generally of equal
2 size.

1 36. The game ball of claim 30, wherein the markings include projections of
2 two or more different sizes.

1 37. A game ball comprising:
2 a casing having a laced region; and
3 a lacing coupled to the laced region of the casing, the lacing including an
4 outer material and an inner substrate coupled to the outer material, the outer material
5 having an exposed surface that is compressible, resilient, and tactile, the outer material
6 having a density of between 0.2 and 1.3 gr/cm³ and a durometer of between 10 and 75
7 on a Shore A hardness scale,

1 38. The game ball of claim 37, wherein the inner substrate includes an
2 intermediate material and at least one strand of high tensile strength material.

1 39. The game ball of claim 38, wherein at least one of the intermediate
2 material and the strand of high tensile strength material has a density that is greater than
3 the density of the outer material.

1 40. The game ball of claim 38, wherein the intermediate material has a
2 durometer value on the Shore A hardness scale that is greater than the durometer value
3 of the outer material.

1 41. The game ball of claim 37, wherein the outer material has a durometer
2 value on the Shore A hardness scale of within the range of 20 to 70.

1 42. The game ball of claim 37, wherein the outer material has a density of
2 between 0.35 to 0.65 gr/cm³.

1 43. The game ball of claim 37, wherein the outer material has a density of
2 between 0.2 to 0.4 gr/cm³.

1 44. The game ball of claim 37, wherein the outer material has a density of
2 between 0.55 to 0.90 gr/cm³.

1 45. The game ball of claim 37, wherein the intermediate material is selected
2 from the group consisting of a vinyl, a plastic, other polymers, a leather, a cloth, a
3 rubber, an elastomer, and combinations thereof.

1 46. The game ball of claim 38, wherein the at least one strand of high tensile
2 strength material is selected from the group consisting of a nylon strand, a polyester
3 strand, a fiber, a wire, a polymer, and combinations thereof.

1 47. The game ball of claim 37 wherein the outer material has a modulus of
2 elasticity of between 30 and 110 kg/cm² and a tensile strength between 450 and 600
3 kg/cm².

1 48. The game ball of claim 37 wherein the outer material is selected from the
2 group consisting of a wet process polyurethane, a dry process polyurethane, a
3 coagulated polyurethane, a polyvinylchloride foam, a rubber, a polymeric material, an
4 elastomeric material, and a combination thereof.

1 49. The game ball of claim 37 wherein at least a portion of the exposed
2 surface includes a pebbled texture.

1 50. The game ball of claim 49, wherein the pebbled texture comprises a
2 plurality of pebble-like projections selected from the group consisting of irregularly
3 shaped pebble-like projections, hemi-spherically shaped pebble-like projections,
4 generally oval shaped pebble-like projections, generally triangular shaped pebble-like
5 projections, generally square shaped pebble-like projections, generally rectangular
6 shaped pebble-like projections, generally diamond shaped pebble-like projections,
7 generally pentagon-shaped pebble-like projections, other polygonal shaped pebble-like
8 projections, generally conical pebble-like projections, generally frustoconical pebble-

9 like projections, generally cylindrical pebble-like projections, generally pyramid-shaped
10 pebble-like projections, generally cubic pebble-like projections, and combinations
11 thereof.